



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,258	07/12/2001	Sarat C. Sankaran	60025-0012	3816
21186	7590	06/24/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402-0938			HECK, MICHAEL C	
		ART UNIT	PAPER NUMBER	3623
DATE MAILED: 06/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/905,258	SANKARAN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Michael C. Heck	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 July 2001.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-48 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-48 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 12 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/22; 1/28; 10/9.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

Art Unit: 3623

### **DETAILED ACTION**

1. The following is a First Office Action in response to the application filed 12 July 2001. Claims 1-48 are pending in this application and have been examined on the merits as discussed below.

#### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 608. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract

on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it exceeds the 150-word limit. Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities:

- On page 5, line 10, delete " an official revenue forecast in timely manner", and insert – official revenue forecast in **a** timely manner --.
- On page 6, lines 16-17, delete "are subsequently e-mailed to up each level of the respective", and insert -- are subsequently e-mailed to each level of the respective --.
- On page 31, line 12, delete "marketing organization forecast rollup is rolled up along product data hierarchy 604", and insert -- marketing organization forecast rollup **604** is rolled up along product data hierarchy **450** --.
- On page 42, line 4, delete "twp", and insert – **two** --.

The above citation is a mere guide. Applicant is requested to review the specification thoroughly to eliminate additional errors. Appropriate correction is required.

***Claim Objections***

5. The following claims are objected to because of the following informalities:
  - **Claim 30** is objected to because Claim 30 claims dependency to claim 6, however the dependency should be to claim 29 since claim 6 refers to "product" and claim 29 refers to "customer", which is the subject of claim 30. For examination purposes the Examiner interprets claim 30 to be dependent to claim 29.
  - **Claim 40** is objected to because Claim 40 claims dependency to claim 6, however the dependency should be to claim 39 since claim 40 refers to a computer-readable medium. For examination purposes the Examiner interprets claim 40 to be dependent to claim 39. Appropriate correction is required.
6. The second set of **claims 40-43**, lines 195-230, are misnumbered. For examination purposes the Examiner renumbered the claims and adjusted the claim dependencies as follows:
  - Misnumbered claim 40, line 195, has been renumbered to claim 45.
  - Misnumbered claim 41, line 201, has been renumbered to claim 46, with dependency to claim 45.
  - Misnumbered claim 42, line 210, has been renumbered to claim 47, with dependency to claim 46.
  - Misnumbered claim 43, line 219, has been renumbered to claim 48.

### **Claim Rejections - 35 USC § 101**

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. **Claims 1-48** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature, which constitute "descriptive material". Abstract ideas, or the mere manipulation of abstract ideas, are not patentable. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58. MPEP 2106 IV B.1. Nonfunctional descriptive material includes but is not limited to music, literary works and a compilation or mere arrangement of data. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. As to Claims 1-48, the claims merely recite nonfunctional descriptive material where the user is allowed access to stored forecast data and can traverse the database based on access rights. Nothing is done with the stored data to breathe life into the invention. To be statutory, a claimed computer-related process must either: (a) result in a physical transformation outside the computer for which a practical application in the technological arts is either disclosed in the specification or would have been known to a skilled artisan, or (b) be limited to a practical application within the technological arts. Clearly, a physical transformation outside the computer does not take place nor does it apply to the safe harbors as disclosed in the MPEP, therefore, the claimed process is

limited to a practical application within the technological arts. A claim is limited to a practical application when the method as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. What is determinative is not how the computer performs the process, but what the computer does to achieve a practical application. The claimed invention does not produce anything, that is, it does not impart functionality either to the data as so structured, or to the computer, therefore is not concrete, tangible and useful, therefore does not meet the practical application requirement. In summary, the claimed invention merely stores forecast data to be read or outputted by a computer without creating any functional interrelationship, therefore is not a statutory process, machine, manufacture or compilation of matter.

9. In addition, **Claims 1-12 and 25-34** are further rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must

Art Unit: 3623

somewhat apply, involve, use, or advance the technological arts. In the present case, **claims 1-12 and 25-34** only recite an abstract idea. As to **claim 1**, the recited steps of identifying, from a plurality of customers, a set of one or more customers associated with a particular user; selecting a set of one or more products from a plurality of products; and allowing the particular user to access forecast data for the set of one or more products for each customer from the set of one or more customers does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for managing access to forecast data, therefore, is deemed to be directed to non-statutory subject matter. As to **claim 25**, the recited steps of identifying, from a plurality of products, a set of one or more products associated with a particular user; selecting a set of customers from a plurality of customers; and allowing the particular user to access forecast data for the set of one or more customers for each product from the set of one or more products does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The method only constitutes an idea for managing access to forecast data, therefore, is deemed to be directed to non-statutory subject matter.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implications of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the

claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above. Looking at the claim as a whole, nothing in the body of the claim recites any structure or functionality to suggest that a computer performs any of the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. As indicated above, the claimed invention does not produce a useful, concrete, and tangible result.

Looking at the claims as a whole, nothing in the body of the claims recite any structure or functionality to suggest that a computer performs a task. While claims 2-5 and 26-28 recite nodes, this amounts to only organizing data where nothing is done (i.e., computing) to breathe life into the invention.

Since the claimed invention, as a whole, is not within the technological arts as explained above and does not produce a useful, concrete, and tangible result, the same rejection as stated above for claims 1 and 25 applies to **claims 2-13 and 26-34**.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3623

11. **Claim1-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sultan (U.S. Patent 6,804,657) in view of Mentzer et al. (Mentzer et al., Benchmarking Sales Forecasting Management, *Business Horizons*, May-June 1999, p. 48-56 [GOOGLE]). Due to the infinite nature of the claims as pointed out in paragraphs 7-9, the claimed invention is unpatentable over the cited prior art.

12. As to **claims 1-12 and 25-44**, Sultan discloses an approach for managing forecast data comprising a method for managing forecast data by identifying, from a plurality of customers, a set of one or more customers associated with a particular user; selecting a set of one or more products from a plurality of products; and allowing the particular user to access forecast data for the set of one or more products for each customer for the set of one or more customers; and by identifying, from a plurality of products, a set of one or more products associated with a particular user; and selecting a set of customers from a plurality of customers. Specifically, Sultan teaches generating a real time global sales forecast for a company that includes the steps of defining a hierarchical structure for a sales force of the company and defining a place within the structure for each member thereof. Original pipeline sales information may then be remotely entered by members of the sales force tagged to the customer, to the relevant product and/or services and to that member of the sales force having entered it. Pipeline sales information is defined as the value of the goods and/or services that the sales person believes he or she will sell to a given customer over a specified period of time. Each member of the sales force is assigned a permission level that determines what information is available to each person within the sales force and in particular,

what forecast information is visible, accessible and/or modifiable to and by each person. The rolled up pipeline and/or forecast information may represent a Regional Manager's rolled up forecast to include all those directly or indirectly reporting to him; or may represent anticipated sales across product lines or for a single product, for any period for which pipeline information exist (Abstract, col. 5, lines 13-31, col. 6, lines 27-48 and col. 11, lines 9-26). Sultan fails to teach allowing the particular user to access forecast data for the set of one or more customers for each product for the set of one or more products. Mentzer et al. teach a functional integration stages where in stage 1, marketing wants yearly products line forecasts and sales wants quarterly forecasts by salesperson territory. To improve, integration requires that common goal setting with regard to forecasting be encouraged across functional areas through communication and company-wide information access. In forecasting approach stage 4, companies fully realize that top-down and bottom-up forecasting approaches are interdependent rather than independent processes. Thus, any changes to one forecast are reconciled with forecasts at the same level from the other approach. To improve the forecasting approach, companies should investigate the possibility of segmenting out key customers and forecasting them separately. Products can also be segmented, with the segments divided according to their demand partners, importance to the company, responsiveness to demand promotions, life cycle stage, shelf life, value, customer service sensitivity, and raw material and production order lead times. To improve forecasting systems, customers should move to a client-server architecture, which abolishes the "islands of analysis" and allows all the functional areas involved in or

Art Unit: 3623

affected by the forecast to have access and input into the process (para 10, 27, 32, 38). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include the recommendations of Mentzer et al. with the teachings of Sultan since Sultan teaches generating real time sales forecasts upon demand (col. 2, lines 8-37). Accuracy of sales forecast allows companies to respond quickly to today's ever-changing customer demand. Having up-to-the minute forecasting capabilities, corporations and managers are able to flexibly allocate human and physical resources where they will be most effective and identify and anticipate trends in the marketplace (Sultan: col. 12, lines 24-29). Forecasting performance evaluation is still based on accuracy, but with more recognition that accuracy affects inventory levels, customer service, and marketing and financial plans (Mentzer et al.: Figure 7, Stage 3). Both Sultan and Mentzer et al. teach sales forecasting, therefore there is motivation to combine with a reasonable expectation of success, and the features of the invention are taught by the combination of Sultan and Mentzer et al.

**Claims 13-24 and 35-48** substantially recite the same limitations as that of claims 1-12 and 25-34 with the distinction of the recited method being a computer-readable medium and apparatus. Hence the same rejection for claims 1-12 and 25-34 as applied above applies to claims 13-24 and 35-48.

***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Helms et al. (Helms et al., Supply Chain Forecasting – Collaborative Forecasting Supports Supply Chain Management, Business Process Management Journal, Vol. 6, No. 5, 2000 [DIALOG: file 15]) disclose the process of collaborative forecasting coordinates the gathering of expertise and information from diverse sources and the consensus building that turns these inputs into a more accurate, effective forecast used by the entire supply chain.
- Hekmatpour (U.S. Patent 5,696,885) discloses an expert system and method employing hierarchical knowledge base, and interactive multimedia/hypermedia applications.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**

Or faxed to:

**(703) 872-9306** [Official communications; including After Final communications labeled "Box AF"]

**(571) 273-6730** [Informal/Draft communication, labeled "PROPOSED" or "DRAFT"]

*mch*  
mch

21 June 2005



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600